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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,192	07/24/2006	Hans-Wilhelm Klein	ZTP04P00116	5399

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EXAMINER
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RIGGLEMAN, JASON PAUL

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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11/25/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,192	<b>Applicant(s)</b> KLEIN, HANS-WILHELM	
	<b>Examiner</b> JASON P. RIGGLEMAN	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Foreign reference</u> .                |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11/12/2008, 10/5/2006, 7/24/2006.

## **DETAILED ACTION**

### ***Specification***

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities: the specification mentions "claim 1" in paragraph [0006].

Appropriate correction is required.

***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "P", "n", "C1", and "C2", in Fig. 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 15 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "time behavior of an electromotive force" is not understood. Claim 15 is not understood.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 13-14, 22, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Haverkramp (German Patent Publication No. DE3803006).

7. Haverkramp teaches a dishwashing machine having a chamber which is at least partially filled with liquid. A pump is driven by a motor (4) and draws fluid out of the chamber, Fig. 5. A monitoring device detects a speed and power of the motor (see abstract). The speed/power of the motor is detected in order to minimize cavitation and utilize the least amount of water needed. A uniform measuring value is determined for the parameters hence they are not deviating significantly from the predefined values. An inlet valve selectively admits liquid into the chamber and a control device "signals" (controls) if an exceptional state is detected, Paragraph [0003] of English Machine translation. Haverkramp teaches that a pump that isn't pump air has stable power (without fluctuations), paragraph [0006]. There is a means (sensor) for detecting voltage of the motor. There is a filter before an inlet to the pump.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above, in view of Omozawa et al. (JP Patent Publication No. 2001-339980).
11. Haverkramp does not teach that the machine has an inverter for supplying the power to the motor and that the inverter and one of the monitoring device or control device are combined into a component unit; however, Omozawa teaches a control circuit for a dishwasher. The control circuit precludes noise by mounting an inverter and control circuit onto a single substrate (into a component unit). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp with Omozawa to create a single component inverter and control circuit unit which precludes the generation of noise to achieve the expected result.
12. Claims 15-16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above.
13. Haverkramp does not teach that a plurality of circulating paths and that the monitoring device utilizes different values for the power/voltage during use of the circulating paths; however, it has been held that an obvious choice in design absent any showing of criticality is not patentable (*In re Kuhle* 188 USPQ). Dishwashing machines commonly have several circulation paths depending of the step in the cleaning of tableware. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp to maximize the efficiency of washing machine in every step/stage of cleaning the tableware.

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above, in view of Nomura et al. (JP Patent Publication No. 2002-051964).

15. Haverkramp does not teach that the machine has an inverter for supplying the power to the motor and that the inverter and one of the monitoring device or control device are combined into a component unit; however, Nomura et al. teaches a input current of a pump motor to judge foam creation and if the value varies significantly then a warning signal is made to the user (see abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp with Nomura to create a washing machine with means to protect the pump for a dangerous working condition to achieve the expected result. .

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above, in view of Takahashi et al. (JP Patent Publication No. 9-38014).

17. Haverkramp does not teach the motor stoppage; however, Takahashi et al. teaches the stoppage of the motor based on the variation of the output of the voltage detector (see abstract). It is known that power and voltage of a pump motor are correlated. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp with Takahashi et al. to create a washing machine which shuts down when the voltage/power drawn by the pump motor is exceeded a predetermined threshold to achieve the expected result.

18. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above, in view of Smith et al. (US Patent No. 3542496).



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19. Haverkramp does not teach that the motor has an armature disposed in a pump chamber of the pump; however, Smith et al. teaches a conventional vane-type pump having an armature disposed in a pump chamber of the pump. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp with Smith et al. to create a dishwashing machine with a conventional vane pump to achieve the expected result.

20. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above, in view of Bourgeois et al. (US Patent No. 5859520).

21. Haverkramp does not teach synchronous motor speed detection; however, Bourgeois et al. teaches a determining a rotational speed of a synchronous motor from a time behavior of an electromotive force in the windings a motor. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp with Bourgeois et to create a dishwashing machine with a conventional speed measuring means to achieve the expected result.

22. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haverkramp (German Patent Publication No. DE3803006), as applied to claim 13, above.

23. Haverkramp does not teach flushing a the inlet filter when an exceptional state of the pump motor is detected; however, it has been held that an obvious choice in design absent any showing of criticality is not patentable (*In re Kuhle* 188 USPQ). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haverkramp to clean to filter to decrease cavitation (air sucking) and decrease pump damage to achieve the expected result.

*Conclusion*

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 1792

Jason P Riggleman  
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